WHAT IS CLAIMED IS:

1. A compressor assembly comprising:

a compression mechanism;

a motor including a rotor and a stator, said stator having a plurality of stacked laminations;

a shaft having a first end and an opposite second end, said first end operably coupled to said compression mechanism, said shaft extending through said motor and operably coupled to said rotor, said second end extending outwardly from said motor opposite said compression mechanism; and

a bearing support having a central body rotatably supporting said second end of said shaft, an outer ring and a support structure connecting said central body and said outer ring, said outer ring having a plurality of circumferentially distributed bearing surfaces lying in a common plane and compressively abutting a first end of said stator and a plurality of recesses positioned between said circumferentially distributed bearing surfaces whereby said recesses are positioned to receive deformations formed in said stator by compressive forces applied to said stator by said circumferentially distributed bearing surfaces.

2. The compressor assembly of claim 1 further comprising a plurality of fasteners and wherein said outer ring defines a plurality of holes, said plurality of fasteners extending through said holes and compressively biasing said outer ring against said stator.

3. The compressor assembly of claim 2 further including a crankcase abuttingly engaging said stator opposite said bearing support wherein said bearing support and said crankcase compressively engage said stator therebetween, said fasteners securing said crankcase to said bearing support.

4. The compressor assembly of claim 3 wherein said stator includes a plurality of stator openings in alignment with said plurality of holes, said fasteners extending through said stator openings.

5. The compressor assembly of claim 3 wherein said fasteners are positioned radially outwardly of said stator.

6. The compressor assembly of claim 3 wherein said crankcase rotatably supports said shaft between said compressor mechanism and said motor.

7. The compressor assembly of claim 1 wherein said support structure comprises a plurality of support arms extending from said central body to said outer ring.

8. The compressor assembly of claim 1 further comprising a bearing mounted in said central body and rotatably supporting said shaft.

9. The compressor assembly of claim 1 further comprising a housing defining an interior plenum; said compression mechanism, said motor, said shaft and said bearing support disposed within said interior plenum, a portion of said housing forming a cylindrical wall securely engaged with said outer ring.

10. The compressor assembly of claim 9 wherein said outer ring includes a substantially cylindrical outer perimetrical edge securely engaging said cylindrical wall.

11. The compressor assembly of claim 1 wherein said compression mechanism is a scroll compression mechanism.

12. A method of supporting a shaft in a compressor, said method comprising:

providing a motor having a laminated stator and a rotor;

operably coupling a shaft with said rotor, said shaft having a first end and an opposite second end;

operably coupling a compressor mechanism to the first end of the shaft;

providing a bearing support member having a central body and a plurality of circumferentially distributed bearing surface lying in a common plane and a plurality of recesses positioned between said circumferentially distributed bearing surfaces;

rotatably supporting said shaft within said central body; and

compressively engaging one end of said laminated stator with said plurality of circumferentially distributed bearing surfaces wherein at least one stator lamination at least partially deformingly protrudes into at least one of said recesses.

13. The method of claim 12 wherein said bearing support supports said second end of said shaft.

14. The method of claim 12 wherein compressively engaging one end of said laminated stator with said plurality of circumferentially distributed bearing surfaces further comprises positioning a crankcase against an opposite end of said stator, inserting a plurality of fasteners through said outer ring and engaging said crankcase with said fasteners.

15. The method of claim 14 further comprising rotatably supporting said shaft with said bearing mounted in said crankcase between said motor and said compressor mechanism.

16. The method of claim 12 further comprising disposing said compressor mechanism, motor and bearing support within a housing having a cylindrical wall and wherein said bearing support is mounted within said housing by engaging a radially outer surface of said outer ring with said cylindrical wall.